WHAT IS CLAIMED IS:

1. A through weld method applied to aluminum or aluminum alloy welding base metals using high energy beams wherein an ambience of a shield gas is formed to cover a submerged-scar made on a welding site of said welding base metals at a side of penetrating out of said high energy beam through said welding base metals.

2. A through weld method applied to aluminum or aluminum alloy welding base metals using high energy beams according to Claim 1 wherein an inert gas is used for said shield gas.

3. A through weld method applied to aluminum or aluminum alloy welding base metals using high energy beams according to Claim 2 wherein argon gas, nitrogen gas or helium gas is used for said inert gas.

4. A through weld method applied to aluminum or aluminum alloy welding base metals using high energy beams according to Claim 1 wherein said welding base metals are fixed onto a mounting stage which comprises:

a chamber constructed therein,

an open hole that opens at an upper side of said mounting stage which opens to said submerged-scar and leads said shield gas supplied to said chamber, and

a shield gas supply that provides said ambience of said shield gas in said chamber.

5. A through weld method applied to aluminum or aluminum alloy welding base metals using high energy beams according to Claim 1 wherein;

said welding base metals are fixed onto a mounting stage, and

said shield gas is provided by a shield gas supply that comprises a nozzle to supply said shield gas and a manipulator to move and position said nozzle against said submerged-scar

6. A through weld method applied to aluminum or aluminum alloy welding base metals using high energy beams according to Claim 4 wherein said nozzle is set upward to supply said shield gas vertical to said submerged-scar.